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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,244	03/20/2001	Teruji Yamakawa	0941.65336	1734
24978	7590	03/28/2005	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,244

Applicant(s)

YAMAKAWA ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7 and 17-19 are pending for the examination. Claims 17-19 are newly presented for examination.

RCE/CPA STATUS

2. The request filed on 1-24-05 for Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 17-19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Watanabe, EPA 0526185 A2 (hereafter Watanabe).

As to claim 1, Watanabe discloses the invention as claimed [see Figs. 1-14, especially fig. 1-8 and 10] including employing a ZCAV system, which is switching modes between two speeds, comprising the steps of:

a detecting step which detects a state within a memory which temporarily stores write data to be written on the recording medium and/or read data read from the recording medium [col. 5, lines 1-50]; and

a controlling step which switches and controls recording medium based on the state detected by the detecting step, depending on whether an access request is a sequential access request or a random access request and also depending on an area of the recording medium accessed in response to the access request. said area being one of a plurality of areas of the

Art Unit: 2655

recording medium dividing the recording medium in the radial direction thereof [col. 5, lines 1-50 7 col. 6, line 44 to col. 7, line 22]

wherein said plurality of areas are independent of the plurality of zones, and include at least a first area [area A] in which the rotational speed of the recording medium is capable of being set to a first speed SP1 [2400 rpm], a second area [area B] in which the rotational speed of the recording medium is capable of being set to the first speed SP1 or a second speed SP2 [3000 rpm] and a third area [area C] in which the rotational speed of the recording medium is capable of a rotational speed of the being set to the first speed SP1 . the second speed SP2 or a third speed SP3 [3600 rpm], where $SP1 < SP2 < SP3$ [page 6, line 44 to page 7, line 42 and fig. 10].

4. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed when a capacity of the memory occupied by the read data exceeds a first capacity during a read access responsive to the access request, and switches the rotational speed when a vacant capacity of the memory exceeds a second capacity during a write access responsive to the access request [page 5, line 48 to page 6, line 41 & fig. 5-8].

5. The aforementioned claim 3, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed by giving priority to an access which uses a rotational speed in use [page 5, line 48 to page 6, line 41 & fig. 5-8].

6. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed by giving priority to an access which uses a rotational speed in use [page 5, line 48 to page 6, line 41 & fig. 5-8].

Art Unit: 2655

7. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed after a predetermined time elapses from a time when conditions for switching the rotational speed are satisfied [page 5, line 48 to page 6, line 41 & fig. 5-8].

8. The aforementioned claim 6, recites the following steps, inter alia, disclosed in Watanabe:

wherein said controlling step switches the rotational speed after a predetermined time elapses from a time when conditions for switching the rotational speed are satisfied [page 5, line 48 to page 6, line 41 & fig. 5-8].

9. The aforementioned claim 7, recites the following steps, inter alia, disclosed in Watanabe:

wherein said controlling step switches the rotational speed after a predetermined time elapses from a time when conditions for switching the rotational speed are satisfied [page 5, line 48 to page 6, line 41 & fig. 5-8].

10. The aforementioned claim 17, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed of the recording medium from an arbitrary speed to a speed that is higher than the arbitrary speed only when the access request is a read request for a hit target read data stored in the memory satisfied [page 5, line 48 to page 6, line 41 & fig. 5-8].

11. The aforementioned claim 18, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed of the recording medium from an arbitrary speed to a speed that is higher than the arbitrary speed only when a vacant

Art Unit: 2655

capacity of the memory exceeds a predetermined value satisfied [page 5, line 48 to page 6, line 41 & fig. 5-8].

12. The aforementioned claim 19, recites the following steps, inter alia, disclosed in Watanabe:

said controlling step switches the rotational speed of the recording medium from an arbitrary speed to a speed that is higher than the arbitrary speed only when a read hit target data stored in the memory amounts to a predetermined percentage [90 %] of a total capacity of the memory or greater [page 5, line 48 to page 6, line 41 & fig. 5-8].

13. Applicant's arguments with respect to above claims have been considered but are moot in view of the new grounds of rejection.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (571) 272-7629.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



Gautam R. Patel
Primary Examiner
Group Art Unit 2655

GAUTAM R. PATEL
PRIMARY EXAMINER

March 13, 2005